



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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IDEM Annual Reports

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The Following Reports Have No Activity

Water Body Designation as an Outstanding State Resource: IC 13-18-3-2

Outstanding State Resource Water Improvement Fund Report: IC 13-18-3-14

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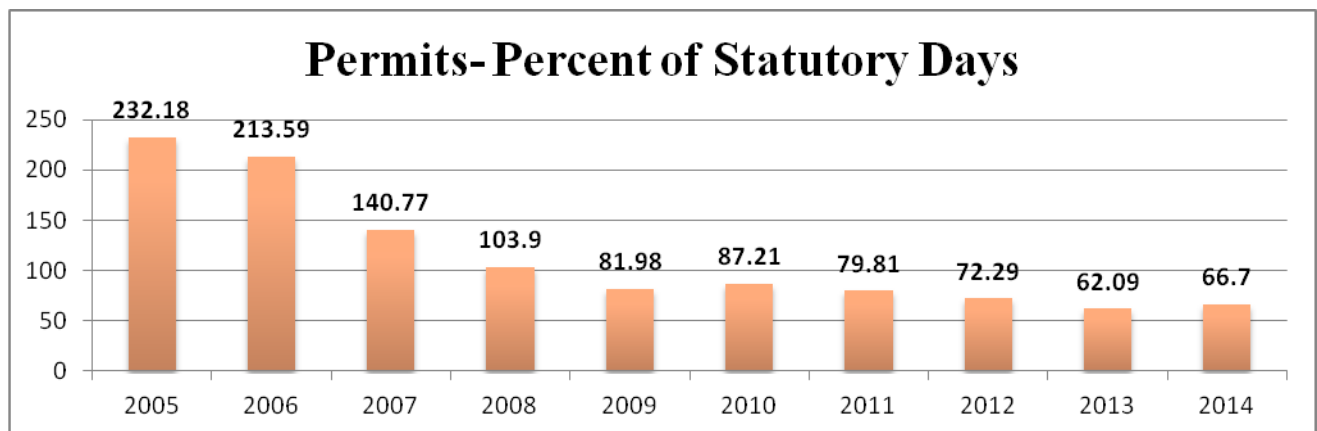
Permit Process Report: IC 13-15-12

Permit Efficiency:

Total calendar days accumulated in issuing environmental permits, as determined by state statute

Green is at or below 85% Yellow is above 85% and below 95%

	Current	85%	95%	Statutory
Land	24,480	30,396	33,972	35,760 statutory
Air	57,261	54,366	60,762	63,960 statutory
Water	29,862	55,921	62,500	65,790 statutory
Totals	111,603	140,683	157,234	165,510



IDEM Back Logs Eliminated

- On January 10, 2005, there were 263 administratively extended NPDES permits and 289 unissued Title V permits. All of those have been issued and IDEM now issues permits using less than 70% of the statutorily allowed days.
- On January 10, 2005, there were 250 unresolved enforcement cases over 2 years old. Now there is only 1 case that is over 2 years old.

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IDEM Financial Status

- IDEM's FY 2014-2015 appropriation is sufficient for current program needs.
- For FY 2016-2017, IDEM expects to have sufficient total funds, but some individual dedicated funds will be insufficient for the needs of their programs, while other funds will receive income in excess of needs.
- Possible federal funding reductions are a potential issue.
- The table below is the 2013 IDEM Revenue vs. Cost-to-Permit:

	# Permit Actions		Dedicated	Federal	Total Revenue	Total Cost
Air	355	Title V	\$ 9,826,041		\$ 9,826,041	\$ 4,462,570
Air	181	FESOP	\$ 1,326,000		\$ 1,326,000	\$ 1,770,400
Air	172	MSOP				\$ 873,181
Air	70	SSOA	\$ 84,450		\$ 84,450	\$ 539,879
Air	106	Registration				\$ 78,656
Land	175	Septage Permits				\$ 24,279
Land	0	CAFO Permits	\$ 9,600		\$ 9,600	\$ 2,204,229
Land	248	CFO Permits	Incl. above		Included above	
Land	35	Biosolid (Land App)				\$ 172,914
Land	14	SW processing			\$ 3,260,970	\$ 690,948
Land	16	SW Transfer Stations			Included above	
Land	65	SW Landfills			Included above	\$ 812,433
Land	11	Yard Waste				\$ 428,995
Land	11	Waste Tires	\$ 1,362,464		\$ 1,362,464	\$ 387,234
Land	27	HW Permits	\$ 1,323,930	\$ 2,621,942	\$ 3,945,872	\$ 6,152,409
Land	0	Biomass Permits				
Land	0	Alternative Fuel				
Water	515	Wetlands	\$ 0	\$ 500,000	\$ 500,000	\$ 496,109
Water	163	DW Const. Permits	\$ 38,550	\$ 350,060	\$ 388,610	\$ 3,529,481
Water	339	DW Const. NOIs	\$ 0	\$ 0	\$ 0	\$ 0
Water	368	WW Const. Permits	\$ 4,375	\$ 0	\$ 4,375	\$ 692,712
Water	1585	NPDES Permits	\$ 4,151,676	\$ 0	\$ 4,151,676	\$ 5,341,798
		Totals	\$ 18,127,086	\$ 3,472,002	\$ 24,860,058	\$ 28,658,227

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ADMINISTRATIVELY EXTENDED NPDES PERMITS: IC 13-15-4-19

NPDES Permit Renewals	
Number of Pending NPDES Renewals Submitted On-Time	0
Number of Pending NPDES Renewals Submitted Late (< 180 days prior to expiration date)	1
Number of Pending General NPDES Renewals Submitted Late (< 90 days prior to expiration date)	0
Total Number of Pending NPDES Renewals as of 7/1/2014	1

* Additional Notes	
Of the pending NPDES permit renewals, numbers which have already been public noticed.	0
EPA-defined Permit Backlog (only counts a permit as backlogged if it is still pending > 180 days past the Expiration Date)	0

New NPDES Permits	
Number of Pending New NPDES applications exceeding the statutory timeframes of IC 13-15-4-1	0

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ENFORCEABLE OPERATING AGREEMENT PROGRAM REPORT:

IC 13-17-13-3

The Indiana Department of Environmental Management (IDEM) has a Source Specific Operating Agreement (SSOA) program (pursuant to 326 IAC 2-9) under which specific types of activities may operate, provided that the source accepts the pre-established terms of the SSOA "as is." Although a source may not simultaneously operate under more than one of the same type of SSOA, sources can operate under up to 4 different SSOAs, as long as the total potential to emit for any regulated pollutant, as limited by the SSOAs, does not exceed major source levels.

In all, there are 23 separate SSOAs available to applicants, covering 13 specific types of activities. For those SSOAs that limit the total potential to emit for any regulated pollutant to less than twenty-five (25) tons per year, a public comment period is not required (for a list of these SSOAs, see 326 IAC 2-1.1-3(d)). However, pursuant to 326 IAC 2-5.1-3(a)(1)(E), for those SSOAs that have a limited potential to emit for any regulated pollutant of twenty-five (25) tons per year or more, a New Source Review (NSR) Permit for approval to construct and a thirty (30) day public comment period is required. The final issuance of any SSOA is appealable. With the exception of coal mining and some stone crushing SSOAs, there is no annual fee required, but sources are required to file an annual Compliance Notification. Sources are not required to renew their SSOA.

Pursuant to 326 IAC 2-9-1(i), a SSOA does not relieve the Permittee of the responsibility to comply with the provisions of any other applicable federal, state, or local rules, or any New Source Performance Standards (NSPS), 40 CFR Part 60, or National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 or 40 CFR Part 63.

As of **June 30, 2014**, there were **783** currently permitted Source Specific Operating Agreement (SSOA) sources. In **FY14** (July 1, 2013 – June 30, 2014), there were SSOAs issued to **33** sources. In July 2014, there were SSOAs issued to **2** sources.

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LEGISLATIVE REPORT ON CFO/CAFO ACTIVITIES FY 2013

Senate Resolution 2512-2007

The Indiana Department of Environmental Management's (IDEM) Office of Land Quality administers the animal feeding operation regulatory program in Indiana. This program includes permitting, compliance monitoring and enforcement activities for 1,163 Confined Feeding Operations (CFOs) and 682 Concentrated Animal Feeding Operations (CAFOs) for a total of 1,845 operations subject to permitting and inspection. In accordance with Senate Resolution 2512, the below information is provided by the Indiana Department of Environmental Management for the time period July 1, 2013 through June 30, 2014.

Permit Type	Reason for Inspection	Number of Inspections
CFO	Paperwork Certificate of Completion (CoC) Follow-Up	19
	Compliance Assistance	28
	Construction	48
	Complaint Inspection	8
	Follow-Up Inspection	66
	Routine Inspection	226
	Spill Response Inspection	2
	Voidance	85
	Other (permit, enforcement, site status...)	46
	Total	528
CAFO	Paperwork (CoC) Follow-Up	5
	Compliance Assistance	13
	Construction	103
	Complaint Inspection	18
	Follow-Up Inspection	19
	Routine Inspection	120
	Spill Response Inspection	9
	Voidance	0
	Other (permit, enforcement, site status...)	15
	Total	302
CFO/CAFO Totals	Paperwork (CoC) Follow-Up	24
	Compliance Assistance	41
	Construction	151
	Complaint Inspection	26
	Follow-Up Inspection	85
	Routine Inspection	346
	Spill Response Inspection	11
	Voidance	85
	Other (permit, enforcement, site status...)	61
	Total	830

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CFO and CAFO Violations Cited from July 1, 2013 to June 30, 2014

Permit Type	Citation/Violation	Number of Violations
CFO	Approval and Performance Standards	16
	Discharge and Spill Requirements	9
	Land Application Records	17
	Operating Records	105
	Operational Standards	53
	Land Application	93
	Total	293
CAFO	Approval and Performance Standards	12
	Discharge and Spill Requirements	17
	Land Application Records	4
	Operating Records	36
	Operational Standards	35
	Land Application	21
	Total	125
CFO/CAFO Totals	Approval and Performance Standards	28
	Discharge and Spill Requirements	26
	Land Application Records	21
	Operating Records	141
	Operational Standards	88
	Land Application	114
	Total	418

Permitting Activities: CFO and CAFO Application Details from July 1, 2013 to June 30, 2014

Application Type	Received	Issued	Denied*	Withdrawn
CFO Approval Applications	93	94	1	0
Individual NPDES CAFO Permit Construction Applications	0	0	0	0
<i>Large CAFOs</i>	0	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Total Construction Applications	93	94	1	0
Individual NPDES CAFO Permit Coverage Application	0	0	0	0
<i>Large CAFOs</i>	0	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Individual NPDES CAFO Permit Renewal Application	1	0	0	0
<i>Large CAFOs</i>	1	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Total Other NPDES Permit Applications	1	0	0	0
All Application Totals	94	94	1	0

**CFO approval application denied in FY 2013 due to incomplete application for failure to respond to Notice of Deficiencies. The CFO has since voided their approval since they are under the threshold numbers.*

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CFO and CAFO Enforcement Actions and Penalties

Enforcement Actions and Penalties from July 1, 2013 to June 30, 2014

Notice of Violation Issued			
CFO			22
CAFO			1
Total			23
Agreed Orders			
	Water Quality	Construction Requirements	Permit/Approval Conditions
CFO	0	6	2
CAFO	0	0	0
Totals	0	6	2
Civil Penalties			
	Water Quality	Construction Requirements	Permit/Approval Conditions
CFO	0	\$7,050	\$11,100
CAFO	0	0	0
Totals	0	\$7,050	\$11,100
Total Agreed Orders and Civil Penalties			
CFO	8	\$18,150	
CAFO	0	0	
Totals	8	\$18,150	

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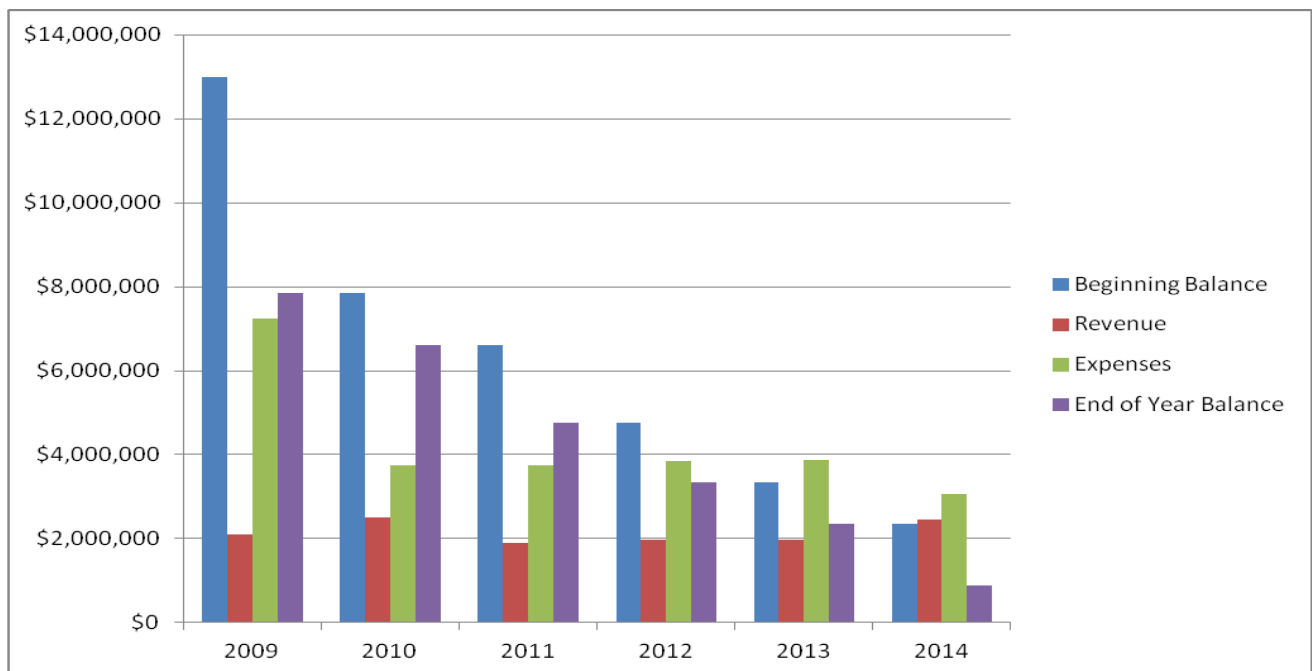
Hazardous Substance Response Trust Fund Report

IC 13-25-4-25

The Hazardous Substance Response Trust Fund (Trust Fund) continues to have greater financial demands placed on it than what the income will support. The cash balance in the Trust Fund at the beginning of the FY 2014 fiscal year was \$2,359,577. In FY 2014, the total revenue from cost recovery, enforcement penalties and hazardous waste disposal tax was \$2,463,678. The expenses, which include the State Cleanup Program (SCP) for management of contaminated sites and Superfund match money for cleanup of sites that qualify for the National Priorities List (NPL) (Superfund), and operation and maintenance of Superfund sites that have completed the Superfund closure process were \$3,059,433. This left a year-end balance of \$1,763,822.

It is expected that the revenue during FY 2015 will be similar to that received in FY 2014; that the expenses covered by the Trust Fund will continue to exceed revenues due to increases of high priority remediation sites in the SCP and expenses required to cover Superfund match money for new EPA lead cleanups and for increases in the operation and maintenance costs of existing Superfund projects, mostly due to inflation. The following graph depicts the declining balance trend for the Hazardous Substance Trust Fund.

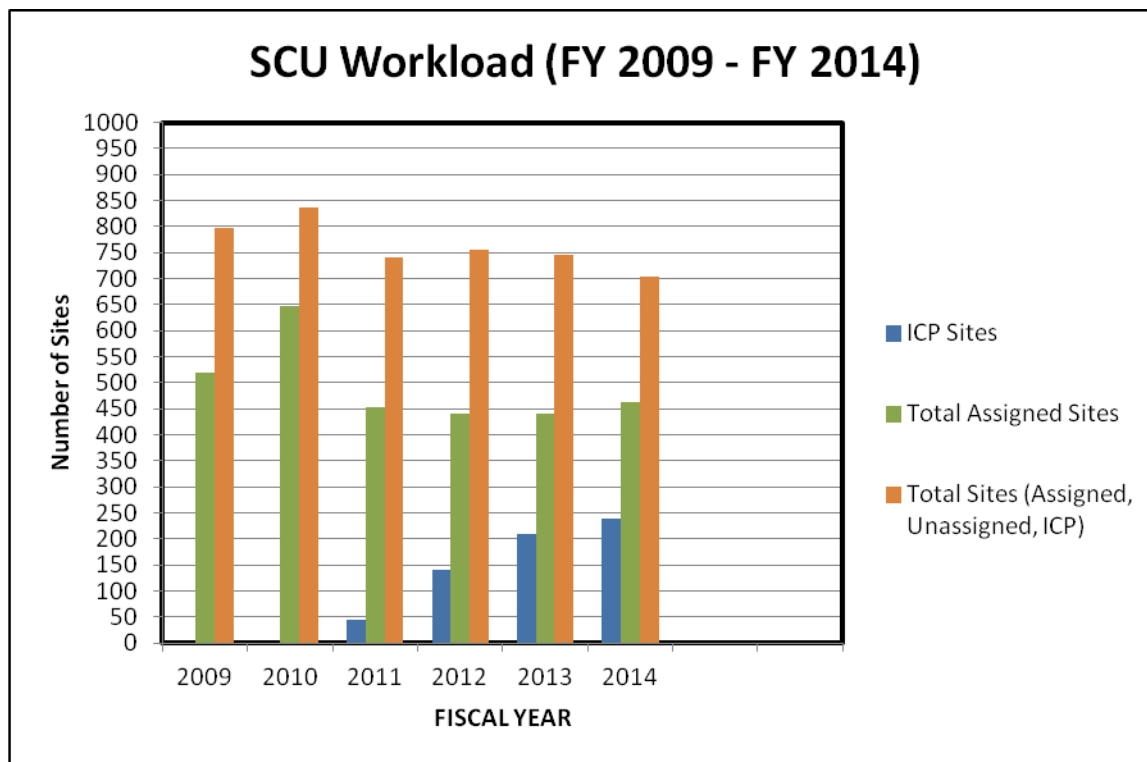
HSRTF Balance and Revenue Trend (FY 2009 – 2014)



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The following is a description of the State Cleanup Program (SCP) activities that are supported by the Trust Fund. The bar graph below depicts the total number of chemically contaminated sites being managed by the State Cleanup Program under the Trust Fund.



The SCP is an enforcement program in the Remediation Branch of the Office of Land Quality. The role of the SCP is to manage the remediation and closure of chemically contaminated sites not eligible to be managed by the Federal Superfund Program and petroleum contaminated sites not regulated by the IDEM Leaking Underground Storage Tank or Excess Liability Trust Fund Sections, which pose a significant potential negative risk to human health or ecology. Common examples of SCP sites include current and former dry cleaners, current and former manufacturing facilities, petroleum pipelines, refineries, and petroleum bulk storage facilities. The sites within the SCP range from less than a quarter acre of contaminated area to ground water impacted areas well over a mile in length. Typical contaminant exposure risks associated with sites in SCP are contaminated residential and municipal wells, contaminated indoor air and surface waters.

The SCP is partially financially self sustaining through the ability to recover operating costs, in FY2014 \$ 863,558.00 was recovered from responsible parties. The Hazardous Substances Response Trust Fund is the source for most of the State Cleanup Section (SCS) funding obtained through the authority of IC 13-25-4-8 to recover the cost of its operating expenses from responsible parties.

In addition to the normal work load, the SCP also works with the Attorney General's Office to obtain financial claims through bankruptcy proceedings and other legal settlements to affect cleanup of contaminated sites. From 2008 to 2013, SCP and the Attorney General's Office have filed more than \$33 million in environmental claims during bankruptcy and other enforcement related legal proceedings and

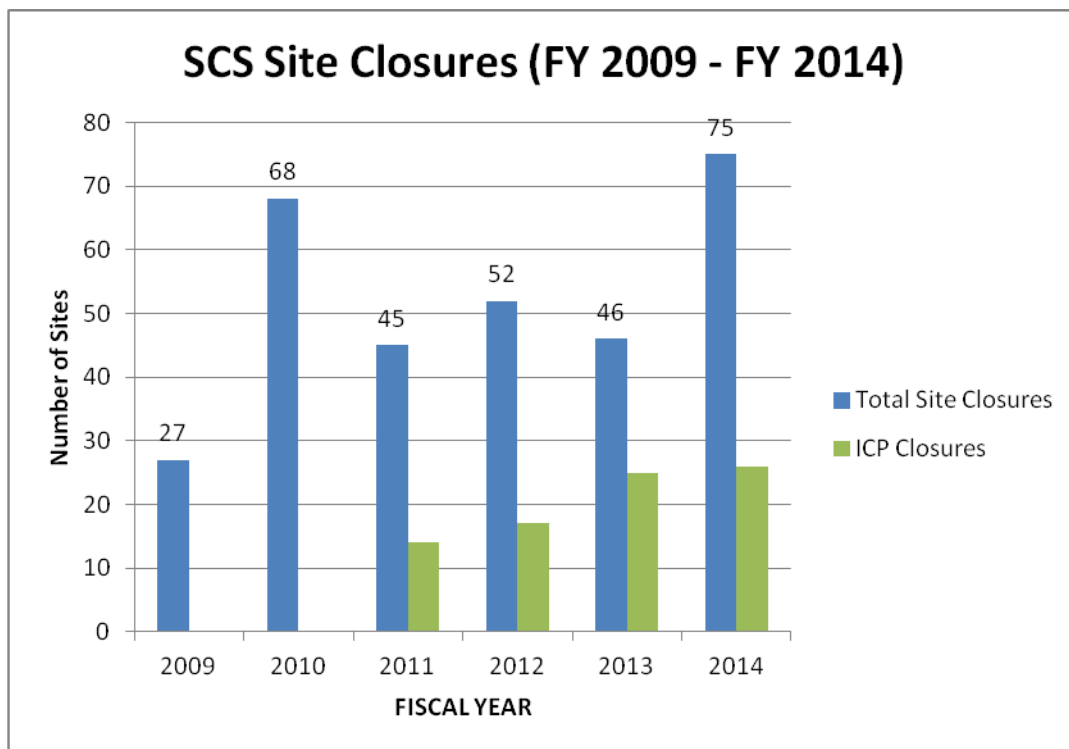
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successfully received approximately \$16 million to be used for cleanup of these sites to mitigate impacts to human health and the environment.

Over the last six years, FY 2009 to FY 2014, SCP has seen a stable trend in the total number of sites requiring remediation oversight. However, during FY 2014 SCP has experienced an increase in the number of high priority sites assigned to project management staff for remediation oversight. During FY 2012, SCP developed a self-implementing closure process to address the backlog of low and medium priority sites that could not be assigned to project management staff due to staffing shortages. This responsible party self-implementing closure process is called the Independent Closure Process (ICP). The ICP has created a structured process for low priority sites to close with no direct management oversight, with only quality assurance auditing by the SCP. This has allowed the SCP to more effectively and efficiently manage its work load and concentrate its efforts on high-priority sites contaminated by hazardous substances. However, from FY 2012 to FY 2014, the total number of sites managed through the ICP has grown from 50 sites to nearly 250 sites. This has required increased administrative cost for SCP and the HSRTF.

As of the close of FY 2014, the SCP had 108 high priority sites, 461 medium priority sites, and 253 low priority sites. During FY 2014, the SCS received a total of 129 new sites. The SCP has overseen the closure of 502 sites since January 1, 2005.



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Waste Tire Annual Report **July 1, 2013 through June 30, 2014**

The Waste Tire Management Fund

Indiana Code (IC) 13-20-13-8 establishes the Waste Tire Management Fund (WTMF) to support Indiana's Waste Tire Management Program. The WTMF includes the remediation and removal of improperly disposed waste tires, promotion of the utilization of processed tire products, and the provision of financial assistance to reduce waste tire generation. Management of the WTMF was transferred from the Office of Lieutenant Governor to IDEM on July 1, 2007. Table 1 represents the revenue and expenditures administered through the fund for Fiscal Years 2008 through 2014.

Fiscal Year	Fee Revenue	IDEM Grants	IDEM Cleanups
2008*	\$1,596,240	\$292,644	\$0
2009*	\$1,623,795	\$1,000,000	\$592,705
2010*	\$2,299,645	\$0	\$0
2011*	\$1,380,044	\$0	\$0
2012*	\$1,325,612	\$0	\$779,873
2013*	\$1,362,464	\$210,679	\$0
2014*	\$1,568,844	\$0	\$0
* July 1, XXXX through June 30, XXXX			

Table 1: Revenue and Expenditures

Suspension of Waste Tire Management Grant Program

The Indiana Department of Environmental Management (IDEM) has temporarily suspended the grant program.

Due to the suspension of the grant program, no projects were funded and no money was expended for FY 2014. Estimates of money required to meet grant requests or recommended changes to the program will not be provided through this annual report until the grant program is reestablished. This report will only review the WTMF as related to the management of waste tires through this program.

The Waste Tire Management Program

The Office of Land Quality (OLQ) is responsible for regulating waste tire management activities. Indiana Administrative Code (IAC) 329 15 provides the framework for the 63 transporters, 18 processors, and 3 storage facilities that maintain waste tire registrations.

More than 64 million passenger tire equivalents (PTEs) were received by waste tire processors. Figure 1 shows how waste tires were utilized from January to December of 2014.

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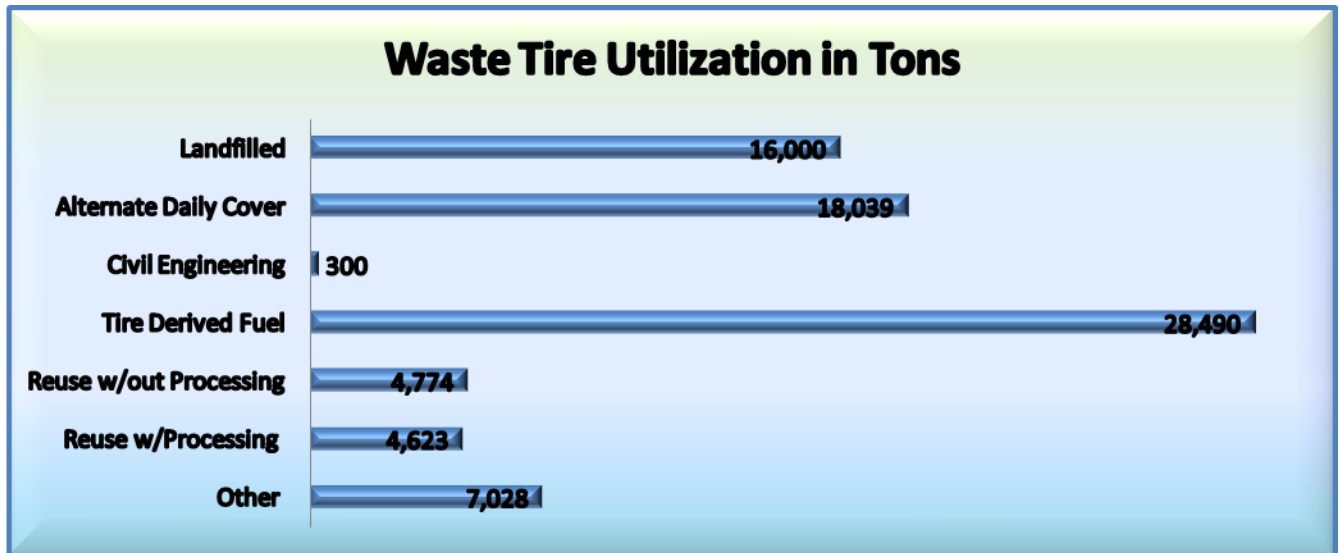


Figure 1: Waste tire utilization for FY 2014.

The following sections detail the registration program that is supported by the WTMF:

Waste Tire Transporters

Waste tire transporters that haul waste tires within Indiana are required to pay the \$25 application fee for a 5-year registration. There is an annual \$25 operating fee but no renewal fees. Transporters must also maintain a financial assurance mechanism of at least \$10,000. Transporters must annually report the number of waste tires handled. A list of currently registered transporters with IDEM may be found online at: http://www.in.gov/idem/files/wt_transporters.pdf.

Waste Tire Processors Facilities

The application and renewal fee for a 5-year waste tire processing registration is \$200. There are no annual operating fees for waste tire processing facilities. They must annually report the number of tires processed and how the waste tires are utilized. If a processor accumulates more than 1,000 tires, they must also register as a storage site.

Waste Tire Storage Facilities

Waste tire storage is limited to 1,000 tires outdoors or 2,000 tires indoors without needing a permit. Waste tire storage sites must register if they plan on storing waste tire above those limits. The application has a \$500 application fee, a \$500 annual operating fee, and they must establish financial assurance. The financial assurance is based on cleanup costs for the volume of material stored on the site. There are no renewal fees for storage sites.

A list of waste tire processors and storage facilities currently registered is available at: http://www.in.gov/idem/files/wt_processors_and_storage.pdf. Registration applications, annual reporting forms, and manifest forms for transporters, processors, and storage facilities are available at: http://www.in.gov/idem/5157.htm#olq_tires.

Compliance and Enforcement

Enforcement actions are initiated by OLQ to correct violations, assure facility compliance, and facilitate clean up of tire dumps that represent a threat to human health and the environment. There were 13 new cases opened by IDEM's enforcement staff regarding waste tire violations in FY 2014. The new cases were 9 open dumps, and 4 unregistered transporters/processors.



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Major sources of waste tires are subject to OLQ compliance inspections for proper waste tire management practices. These include vehicle maintenance facilities, transportation companies, new and used tire dealers, tire retreading plants, and auto salvage operations.



Although waste tire generators or sources are not required to register with OLQ, IC 13-20-14 has waste tire management requirements for specific operations.

New tire retailers are required to accept the same number of waste tires that are replaced by new tires purchased by the consumer. A handling charge is collected by the dealer for this service, in addition to a \$0.25/tire new tire fee. All sources of waste tires are responsible for delivery of their tires to an approved processing facility. This service is provided by registered waste tire transporters. All major sources of waste tires are required to maintain records of waste tire manifests that document proper waste tire management.

Goals

IDEM has established multiple goals to address waste tire management problems in Indiana. Those goals are to promote demand for the most valuable tire-derived products, clean up illegal tire piles, and provide proactive compliance assistance to the industry. IDEM is committed to:

- Working with other Indiana agencies to promote additional testing for applications and establishing standards supporting the use of tire materials in projects.
- Evaluating existing approaches, authorities, and efforts to properly manage waste tires and continue the efforts for waste tire cleanup.
- Working with prospective Indiana companies and institutions to explore opportunities to utilize waste tires in an environmentally sound manner to recover resources or energy.

For more information about waste tires in Indiana and recycling resources, please visit the IDEM Web site at www.recycle.in.gov.

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Indiana Household Hazardous Waste Grant Program Annual Report **IC13-20-20-12**

The Indiana Department of Environmental Management (IDEM), Office of Pollution Prevention and Technical Assistance (OPPTA), provided technical assistance to Indiana local units of government for the development and operation of household hazardous waste (HHW) and conditionally exempt small quantity generator waste (CESQG) collection programs.

Suspension of HHW Grant Program

From 1994 to 2008, IDEM provided 175 HHW grants and 5.8 million dollars in support to communities and solid waste management districts. This funding helped start and expand HHW programs or activities, safe management of household hazardous products, and educate residents about preferred disposal options for HHW. In December of 2008, IDEM suspended state-funded grant programs for local government recycling projects, including the Household Hazardous Waste Grant Program. Due to the suspension of the grant program, no local government projects were funded in 2013, and no money was expended through the grant program. Until the grant program is re-instated, no estimate of money required to meet grant requests or recommended changes to the program will be provided through this annual report. IDEM continues to provide technical assistance to Indiana residents, local government and businesses on HHW and CESQG collection and management issues, including household pharmaceutical and sharps waste management.

Technical Assistance and Support

The following sections provide brief updates on IDEM technical assistance, educational activities informing residents and businesses about ways to reduce HHW and CESQG generation and improper disposal, and the operations of Indiana HHW programs:

Indiana HHW Task Force

IDEM continues to work with the Indiana Household Hazardous Waste Task Force, Inc. (IHHWTF), solid waste management districts (SWMD) and communities to address HHW issues throughout the state. With IDEM's technical assistance, the Task Force promotes the proper, environmentally-safe collection, recycling, and disposal of household hazardous waste. Its 53 members include SWMDs, cities, towns, counties and companies that manage or provide HHW services.

Pharmaceuticals

The proper disposal of expired or unwanted medicines is an issue that has received increasing concern among the public, the medical community, environmentalists and governmental agencies in recent years. Products of concern include prescription, over-the-counter medications, and personal care products. Improper disposal of medicines presents both a public safety and environmental hazard. Studies conducted by the U.S. Geological Survey (USGS) have shown that pharmaceuticals are present in our lakes and streams. Expired or unwanted medicines, if flushed down the toilet or drain, are a source of pollution in wastewater. Because sewage treatment plants are not designed to deal with pharmaceutical waste, these chemicals can be released into streams, lakes, and groundwater and affect fish and other aquatic wildlife.



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In 2013, IDEM provided technical assistance to communities, SWMDs, and organizations to establish pharmaceutical collection programs. Indiana collection programs reported collecting 18.5 tons of household pharmaceutical waste in 2011. Additionally, 40 Marsh pharmacies collected nearly 29,958 vials of pharmaceuticals from 3,148 persons during spring and fall events. On September 17, 2012 the Attorney General also launched the Prescription Drug Abuse Task Force, a group of individuals representing pharmaceutical, medical, solid and hazardous waste, and governmental interests. The Task Force evaluated and discussed the evolving issue of household pharmaceutical waste disposal and the drug abuse epidemic in Indiana. The Task Force is currently expanding take back collection programs throughout the state. Information on the task force is available on IDEM's Website at <http://www.in.gov/idem/recycle/2343.htm>.

2012 HHW Program Collections	
Hazardous Waste	1,923 tons
Used Motor Oil	Not Available
E-waste	5,298 tons
Tires	2,707 tires
Appliances	Not Available
Sharps	Not Available
Commingled Recyclables	201,856 tons

HHW Collection around the state

Household hazardous waste programs collect waste that otherwise would be improperly disposed by dumping in a ditch, poured down drains or storm sewers, or disposed in landfills. Thirty-nine HHW programs, serving 77 percent of Indiana residents, provided IDEM HHW collection information for 2012. As of 2012, the Solid Waste Management Districts implemented a new data collection tracking method using the ReTRAC program. Data from 2013 is currently being compiled. The results from 2012 are offered herein as a reference. More materials were likely collected in 2013 than in 2012. Information on local HHW collection programs can be found at <http://www.in.gov/idem/recycle/2351.htm>.

Most programs that provide HHW services also collect problem materials because of the lack of other means of disposal for these materials and because of increased public demand for collection services. Problem materials include mercury and mercury-containing items, used oil, electronics, tires, appliances, unwanted medicines, and sharps. These problem materials contain toxic or hazardous components that are difficult to dispose of safely, and improper disposal can create environmental and health hazards (see chart above).

Conclusion

IDEM provides support for the growth of HHW programs and services. HHW programs through the Solid Waste Management Districts educate residents on safe storage and management of household chemicals, which helps prevent household accidents and accidental poisoning of children. HHW programs provide a way for residents to safely dispose of used motor oil, gasoline, cleaning agents, paint, pesticides, and other hazardous products used in the home, making homes safer and reducing hazards for fire fighters. The hazardous and problem waste collected and properly disposed of by HHW programs is diverted from disposal in Indiana lakes, streams, storm drains, and ravines, reducing pollution and cleanup cost for Indiana communities. For more information on IDEM HHW reduction efforts, visit <http://www.in.gov/idem/recycle/2351.htm>



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Annual Recycling Report: IC 4-23-5.5-6

The Recycling Market Development Program (RMDP) established under IC 4-23-5.5-14 provides financial and technical assistance to help Indiana businesses increase recyclable material manufacturing capacity, as well as increase the use of recycled content products. Promoting the concept of collecting, using, and producing recycled materials in Indiana is a means of supporting the agency's initiatives of job creation and economic stability leading to environmental stewardship of natural resources.

Recycling Market Development Grants

In Fiscal Year 2014, the Indiana Legislature allocated \$1.1 million to the Recycling Promotion and Assistance Fund (RPAF) for grants to aid private businesses in purchasing equipment specifically needed to remanufacture recyclable materials into finished products or industrial feed stocks. At the August Recycling Market Development Board meeting, only \$600,000 of the total funds were released by the state--\$100,000 for the August meeting, \$500,000 for the November meeting. The remaining \$500,000 was returned to the RPAF.

The RMDB awarded the following grant August 1, 2013:

- **Qumpus, Inc. (Better World Books)** - \$100,000 to purchase software and equipment to further automate the system to track book inventory and increase collection/sales capacity by more than 28%. The company collects books from a variety of sources for resale, redistribution and global literacy programs. A higher percentage of books will also be available for reuse through donation or resale with an estimated increase of 4.4 million books per year. Total project cost - \$200,000; Jobs created - 57; Estimated annual waste diverted -10,856 tons of paper.

The RMDB awarded the following grants November 7, 2013:

- **Ace Recycling** – \$50,000 to expand their e-waste recycling facility to accommodate additional material from the surrounding area and keep the materials local. The company is an R-2 certified e-waste recycler, classified as a collector, recycler and demanufacturer. The funding will assist with the purchase of conveyors, cross belt magnets, forklift, and scales to improve the flow of materials. Total project cost - \$314,000; Jobs created - 6 to 8; Estimated annual waste diverted – 1,756 tons (e-waste, steel and aluminum).
- **Green Plus Plastics** – \$150,000 to purchase additional extruding equipment and wash line to increase their production of recycled resin pellets. Total project cost - \$800,000; Jobs created -7; Estimated annual waste diverted - 6,000 tons of plastic.
- **Eskay Enterprises, Inc. (Legal Chop Shop)** – \$25,000 to purchase a forklift, rack system, pallets and storage boxes for this reuse operation for end of life vehicles. The business salvages the parts for resale, keeping automobile components out of landfills. Total project cost - \$400,000; Jobs created - 3; Estimated annual waste diverted - 87 tons including aluminum, glass, steel and plastic.
- **Midwest Veal** – \$50,000 to update their current manufacturing facility and expanding their recycling/reuse efforts in partnership with Mead Johnson. The company wishes to purchase a compression auger, feed conveyor, and equipment to reclaim baby formula from its packaging and reuse for animal feed. Total project cost - \$206,591; Jobs created - 12 new contractors and 3



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new general laborers; Estimated annual waste diverted - 750 tons of food product, as well as steel and paper.

- **Plastic Recycling** - \$150,000 to purchase and install additional equipment that would allow them to recycle plastic waste from presort facilities or industrial sources. The project will focus on producing recycled resin pellets used in the manufacturing of Styrofoam products like cups, plates, and packing materials. Plastic Recycling Inc. was awarded \$100,000 for a similar project in 2011. Total project cost - \$664,344; Jobs created - 10; Estimated annual waste diverted - 4,039 tons of plastic.

Funding and Revenue

Funding for the Program comes from the Solid Waste Management Fee--a \$0.50 per ton charge on final disposal of solid waste at a landfill or incinerator. The Solid Waste Management Fund receives \$0.25, and the other half of the Solid Waste Management Fee is deposited in a separate fund: the Recycling Promotion Assistance Fund (RPAF), which supports the RMDP. Funding decisions for the RMDP projects are approved by the Recycling Market Development Board.

The revenue from Solid Waste Management fee allocations received for the RPAF for FY 2014 was \$2,710,800¹. Loan repayments received for FY 2014 totaled \$446,290.11.

Suspension of Recycling Grant and Loan Programs

In 2008, IDEM suspended many state grant and loan programs including those for recycling, funded through the Solid Waste Management Fee. Community recycling grants remain suspended, as well as those for schools and local governments.

Summary

The Office of Compliance Support staff continue to further recycling's environmental and economic benefits by offering to help all Hoosiers through technical and financial assistance: whether businesses wishing to set-up shop or citizens needing guidance to find sellers and processors of recyclable goods.

For more information about recycling in Indiana and recycling resources, please visit the *Recycle Indiana* website at <http://www.in.gov/recycle/index.htm>.

¹ The fee allocation amount is from IDEM's Finance Division Legal Fund Analysis Report for June 30, 2014.

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Pollution Prevention Report: IC 13-27-6

The Pollution Prevention and Recycling Program of the Office of Pollution Prevention and Technical Assistance (OPPTA) in the Indiana Department of Environmental Management (IDEM) is submitting this report to the Indiana General Assembly as required by Indiana Code 13-27-6. This report describes Indiana's Pollution Prevention (P2) activities and the measurable reduction results from 2013 efforts when those results are available. The various P2 programs are summarized in the following categories: voluntary reduction programs, technical assistance, partnerships, reports, awards, grants, and education and training programs.

It is important to note that IDEM is continually seeking the most effective method for measuring the positive impact of pollution prevention activities. Currently IDEM uses surveys, annual reports from voluntary recognition program members, and final reports from grantees to measure pollution prevention progress and results. These tools do not capture all achievements resulting from pollution prevention efforts, but they are determined to be the best available tools for IDEM at this time.

Voluntary Recognition Programs

To encourage Indiana entities to pursue better environmental management practices, the P2 Branch offers recognition for participating in the Indiana Environmental Stewardship Program, Indiana CLEAN Community Challenge, and the Five Star Recognition Program.

The Indiana Environmental Stewardship Program (ESP) is a performance-based recognition program for Indiana businesses. Each participating business has implemented an environmental management system, maintains a positive compliance record, and commits to at least one environmental improvement initiative each year. Participants are provided with regulatory benefits, reduced record keeping, advanced notice of routine inspections, and expedited permitting. In 2013, the forty-six member facilities realized reductions in the following:

- Material Use by: 239,560.2 pounds.
- Water usage by: 8,616,668 gallons.
- Energy usage by: 6,472,409 kilowatt hours and 84,088 MMBtu.
- Land and habitat conservation by: 100.2 acres.
- Air emissions by: 15,260,496 pounds of GHGs and 16,204 pounds of VOCs.
- Non-hazardous waste by: 4,195,397 pounds and 1,031,472 pound increase in recycling.
- Hazardous Waste by: 25,446 pounds.

Similar to ESP, the CLEAN Community Challenge is a technical assistance and recognition program for units of local government. CLEAN encourages communities to identify the environmental impacts from municipal operations and create a management plan focused on continual environmental improvement. Total membership in December 2013 was thirteen municipalities. These members have committed to continuous environmental improvement by identifying the potential environmental impacts associated with municipal operations and implementing plans to proactively manage those impacts. Designated communities are required to submit an annual performance report which describes the progress made and

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hurdles overcome on their environmental projects for the year. To date, total reductions reported in 2013 include:

- 442,037 kWh of electricity;
- 3,500 gallons of fuel; and
- 1,762,320 pounds of material usage.

Other environmental improvements were the following:

- 1,780 trees planted;
- 2,807 pounds unwanted medicines collected;
- 3.38 miles of trail constructed;
- 6,828,600 pounds composted; and
- 10,768,717 pounds of materials recycled.

The Five-Star Environmental Recognition Program for Child Care Facilities recognizes facilities that go above and beyond the requirements of environmental, health, and safety regulations. The program helps child care providers to take steps to reduce and eliminate hazards that can cause permanent, long term developmental problems in young children. Eighty-six child care providers participated in the program in 2013.

Partnerships

The Partners for Pollution Prevention, in cooperation with IDEM, held four meetings during 2013 for Indiana entities to share pollution prevention strategies. One of these meetings was the Sixteenth Annual Pollution Prevention Conference and Trade Show. The day's agenda centered on the theme "Pollution Prevention at the Crossroads" and allowed speakers to share information on adopting pollution prevention into everyday business operations. In addition to these ongoing educational opportunities, the Partners' members annually report on the results of their pollution prevention initiatives.

The annual reporting deadline for 2013 reductions is on September 1 2014. Due to the changed due date, the 2013 data has not yet been determined. Total reductions reported by members in 2012 include:

- 348.3 million pounds air emissions;
- 9.97 million pounds solid waste;
- 637 million gallons water usage;
- 6.6 million pounds hazardous material usage;
- 88.4 million pounds hazardous waste; and,
- 114.6 million kilowatt hours energy savings;
- 70 million gallons water pollution.

Additional 2012 data received from the reports reflect the following:

- Of the 70 companies in the program, approximately 50,000 employees were trained in pollution prevention;
- 236 pollution prevention projects were either started or ongoing; and
- 131.4 million pounds of materials recycled.



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Indiana E-Cycle

The Indiana E-Waste Statute (IC 13-20.5) created an extended producer responsibility (EPR) program, known as Indiana E-Cycle, under which manufacturers of video display devices (VDDs) are required to collect and recycle e-waste from covered entities (Indiana households, small businesses, and public schools). The statute requires that manufacturers of VDDs that offer their products for sale to Indiana households annually register with and report to IDEM. Each year these manufacturers are required to collect and recycle 60 percent by weight equivalent of the total weight of VDDs they sold to Indiana households during the previous twelve months. They can collect and recycle a broader range of products of any brand, known as covered electronic devices (CEDs), to meet their obligation. Results from Program Year 4 are as follows:

- 83 registered manufacturers;
- 130 registered brands of video display devices;
- 119 registered collectors;
- 293 registered collection sites;
- 60 registered recyclers;
- 32 recycling facilities registered in Indiana;
- 79% of registered manufacturers met or exceeded their recycling obligation; and
- 20,457,329 actual pounds of e-waste recycled (3.11 lbs/capita).

Governor's Awards for Environmental Excellence

The Indiana Governor's Awards for Environmental Excellence provide recognition to manufacturers, businesses, organizations, vendors, educators, and dedicated individuals for their outstanding environmental initiatives. These awards recognize Indiana's leaders who have implemented outstanding environmental strategies into their operations and decision-making processes. By seeking out and utilizing innovative environmental practices, facilities/programs reduce waste, save money, and contribute greatly to Indiana's environmental protection efforts, as well as benefit the health and welfare of Indiana's communities and the state as a whole.

Awards categories include: Energy/Renewable Resources, Five Years' Continuous Improvement, Greening the Government, Land Use, Outreach or Education, Pollution Prevention, and Recycling/Reuse.

In 2013, a total of ten Indiana businesses were given awards.

Grants

In 2010 IDEM received a grant from the U.S. EPA to Demonstrate Water Preservation and Pollution Prevention in Indiana. This initiative, referred to as the Water Preservation and Pollution Prevention Program (WP4) was developed to assist facility teams in base-lining their water-related systems and identifying opportunities to reduce, reuse, and/or recycle water. Four industrial water users were selected in coordination with an outside vendor who used more than one million gallons of water per month within an area with a Publically Owned Treatment Works (POTW). Outcomes reported from the WP4 assessments include:



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- 166,500,000 identified potential water usage reduction (gallons/year)
- 166,200,000 identified potential waste water reduction (gallons/year)
- \$1,167,634 Total Potential Annualized Cost Savings (\$/year)

Indiana's Clean Vessel Act (CVA) pump-out grant program allows a public or private marina to receive a reimbursement of up to 75% for the purchase and installation of a pump-out. Installing such a system at Indiana marinas will provide boaters with a proper method to dispose of their sewage and thus prevent it from entering Indiana's waters. In fiscal year 2014, grants awarded totaled \$362,036.

Indiana's Boating Infrastructure Grant Program (BIGP) provides grant funds for the construction, renovation, and maintenance of tie-up facilities with features for transient boaters, which are vessels 26 feet or more in length and stay less than 10 days. The grant allows for reimbursement of up to 75% for the purchase and installation of transient docks. These new facilities will allow boaters to come on shore to remove their sewage and enjoy the regional establishments. In fiscal year 2014, grants awarded totaled \$100,000.

Education and Training Programs

OPPTA provides pollution prevention education and training to Indiana schools and universities, the regulated industry, and general public.

91 IDEM staff visited 166 schools and reached over 25,152 Hoosier children during 2013. A variety of topics were covered including nonpoint source water pollution, recycling, and landfill construction.

Another educational initiative is the Volunteer Idling Program (VIP). This program encourages businesses and industries to reduce the amount of fuel burned during unnecessary idling. The VIP Challenge is a pledge that commits manufacturers and fleet owners to reduce idling in their operations and on their campuses. In 2013, the 33 VIP partners continued to go beyond regulatory requirements to reduce unnecessary idling, improve fuel conservation and limit emissions to the environment.

Conclusion

IDEM continues to make progress implementing the Indiana Industrial Pollution Prevention and Safe Materials Act. IDEM focuses on continually improving the programs' effectiveness to reduce pollution and accurately measuring reduction results. At this time, IDEM does not see a need for additional legislation in this area. For additional information on the state of Indiana's P2 Programs please call (800) 988-7901

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Compliance Advisory Panel Report: IC 13-28-3

CTAP Activities July 1, 2013 - June 30, 2014

The federal Clean Air Act requires states to provide compliance assistance. IC 13-28-3 further defines Indiana's implementation of compliance assistance through the Compliance and Technical Assistance Program (CTAP) which has expanded assistance to all environmental programs: air, land and water.

CTAP activities are tracked and the following metrics help to measure program success and staff performance.

Internal program metrics for calendar year 2014 (results as of June 30, 2014):

	<i>2014 Goal</i>	<i>Completed</i>	<i>Percentage of Goal</i>
<i>Site Visits</i>	250	138	55%
<i>Potential Customers</i>	1,356	1,159	85%

Agency metrics:

<i>FY 2014 Goal: 300 site visits/year (average rolling total)</i>	<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
<i>Average Rolling Total of CTAP Site visits</i>	311	315	316	306

Compliance and Technical Assistance Numbers:

- 1,783 total phone contacts
 - 1,043 Air
 - 146 Water
 - 337 Land
 - 257 Multi-Media/ Misc. Assistance
- 280 Site Visits
- Presented information at 29 events to 1,663 attendees

Additional Technical Assistance Provided:

- Provide assistance to the ESP and CLEAN community programs.
- Updated the Indiana Small Business Guide to Environmental, Safety, and Health.
- Worked with IDEM and other state Small Business Environmental Assistance Programs (SBEAP) on several compliance and permitting initiatives. Partnerships are numerous and include the Clean Yard Program, Tire Retailer, Street Sweepings, Secondary Containment and UST Red Tag outreach with OLQ; Asbestos, Collision Repair, Degreasing, Chrome Electroplating, and Boiler MACT guidance with OAQ; and Net DMR, and Antidegradation guidance and outreach with OWQ.
- Promote cooperation between IDEM and regulated entities.
- CTAP Follow-up Letters: Follow-up letters clarify requirements to the customer and can be used to demonstrate the customer is proactively pursuing compliance to IDEM inspectors.
- Continue to manage Small Business Regulatory Coordinator duties as described in IC 4-22-2-28.1.

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Mercury Switches in End of Life Vehicles Activities: IC 13-20-17.7

This program was established to remove mercury switches from end of life vehicles processed in Indiana by motor vehicle recyclers. Implementation of this program addresses the National Emission Standards for Hazardous Air Pollutants for Electric Arc Furnace Steel making facilities.

IC 13-20-17.7-2 requires IDEM to prepare an annual report that includes the number of mercury switches collected from end of life vehicles and the amount of mercury collected.

Mercury Switches Activities July 1, 2013-June 30, 2014

Total Number of Mercury Switches Collected from End of Life Vehicles	17,630 switches
Total Amount of Mercury Collected	38.79 pounds

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E-Waste Report IC 13-20.5-7-4

Electronic waste (e-waste) continues to be one of the fastest growing waste streams worldwide. To help ensure that this waste stream is managed responsibly, the Indiana Electronic Waste Law (Indiana Code 13-20.5), effective July 1, 2009, was passed. Indiana is currently one of 25 states with e-waste legislation and plays an important role in efforts to manage the numerous challenges presented by the significant volumes of e-waste generated each year in the United States.

The Indiana E-Waste Law established a state-wide program for the collection and recycling of e-waste, which was branded as Indiana E-Cycle in 2013. The Indiana Department of Environmental Management (IDEM) was tasked with the implementation and management of the program. Amongst other responsibilities, the law states that the department shall:

1. Adopt forms for use by manufacturers, collectors, and recyclers for all registration statements, certifications, and reports required by the law;
2. Establish procedures for receipt and maintenance of the registration statements and certifications filed with the department under IC 13-20.5-1; and
3. Make statements and certifications easily available to manufacturers, retailers, and the public.

An analysis of the first four years of the Indiana E-Cycle program reveals that each program year, manufacturers collectively exceeded their recycling obligation, to date recycling a total of 87,108,096 pounds of **covered electronic devices (CEDs)** (actual pounds without incentives) from Hoosier **households, small businesses, and public schools**. Households, small businesses, and public schools in Indiana are known as covered entities. While baseline data on e-waste recycling rates prior to the passage of the Indiana E-Waste Law is not available, IDEM is confident that more e-waste has been recycled in the State since the implementation of the law than would have been recycled otherwise.

Implementation Report

This report fulfills the requirements contained in IC 13-20.5-7-4. IDEM is to submit a report concerning the implementation of the Indiana E-Waste Law to the general assembly, the Governor, the Environmental Quality Service Council (now known as the Interim Study Committee on Environmental Affairs), and the Indiana Recycling Market Development Board before August 1.

Required content:

- A summary of information in the annual reports submitted by manufacturers and recyclers.
- Information regarding the total weight of CEDs recycled.
- The various collection programs used by manufacturers to collect CEDs.



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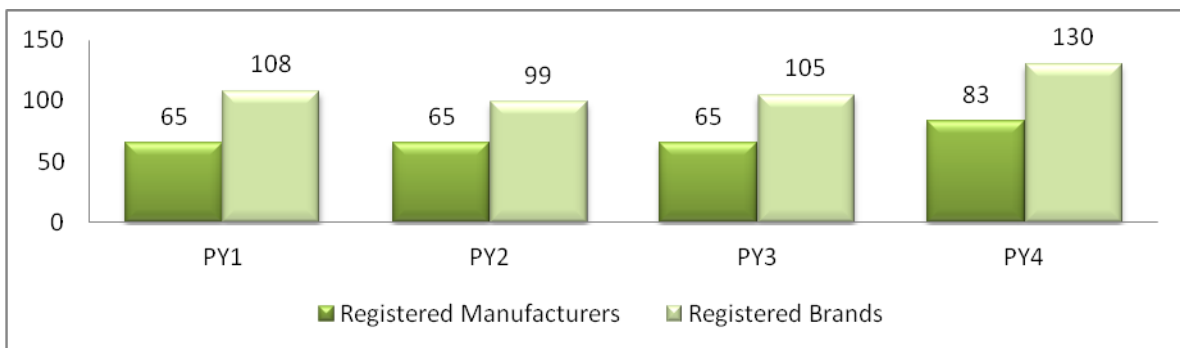
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- Information regarding CEDs that are being collected by persons other than registered manufacturers, collectors, and recyclers.
- Information about CEDs, if any, being disposed of in landfills in Indiana.
- A description of enforcement actions under the Indiana E-Waste Law.

Program Participation

Program Year 4 (PY4) was the first program year in which the number of registered manufacturers exceeded 65 (Figure 1). While it is encouraging that the number of registered manufacturers is increasing, there remain nearly 100 manufacturers that are subject to Indiana E-Cycle registration requirements but have not registered with the program. The number of registered manufacturers is expected to continue to increase in future years as new manufacturers enter the market and unregistered manufacturers are made aware of the registration requirement and come into compliance. IDEM routinely conducts research to determine which companies selling VDDs to Indiana households have failed to register with Indiana E-Cycle. These manufacturers are contacted and informed of the registration requirement and provided with a registration form.

Figure 1: Registered Manufacturers and Brands



Manufacturers that sold at least 100 units of VDDs to Indiana households during the previous year are required to pay a \$5000 registration fee for the first program year they register and a \$2500 registration fee each year thereafter for which sales of VDDs to Indiana households during the previous year were 100 units or more. The registration fees are used exclusively to fund the administration of Indiana E-Cycle and do not fund recycling directly.

Manufacturers registered with Indiana E-Cycle utilize three types of collection programs to fulfill their recycling obligations:

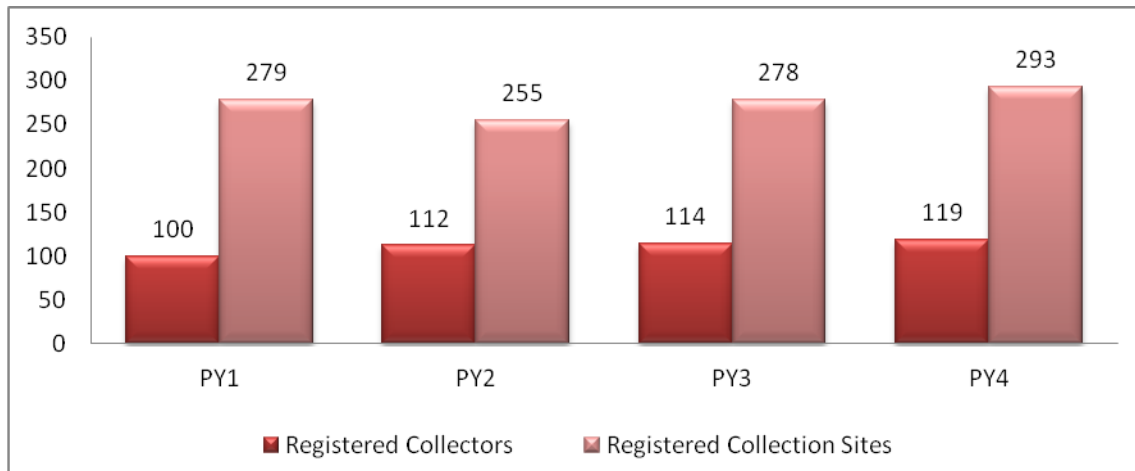
1. Permanent Collection Sites,
2. Temporary/Special Collection Events, and
3. Manufacturer Take-Back Programs.

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The number of both registered **collectors** and registered collection sites saw a slight increase from Program Year 3 (PY3) to PY4 (Figure 2) to a total of 119 collectors and 293 collection sites. There were 19 more collectors and 14 more collection sites registered during PY4 than during PY1. Collectors and collection sites do not have to be located in Indiana to participate in the program. Collectors are not allowed to perform any dismantling of CEDs. Dismantling of CEDs requires registration as a recycler. Most registered recyclers are also registered as collectors; however, most collectors are not also recyclers.

Figure 2: Registered Collectors and Collection Sites

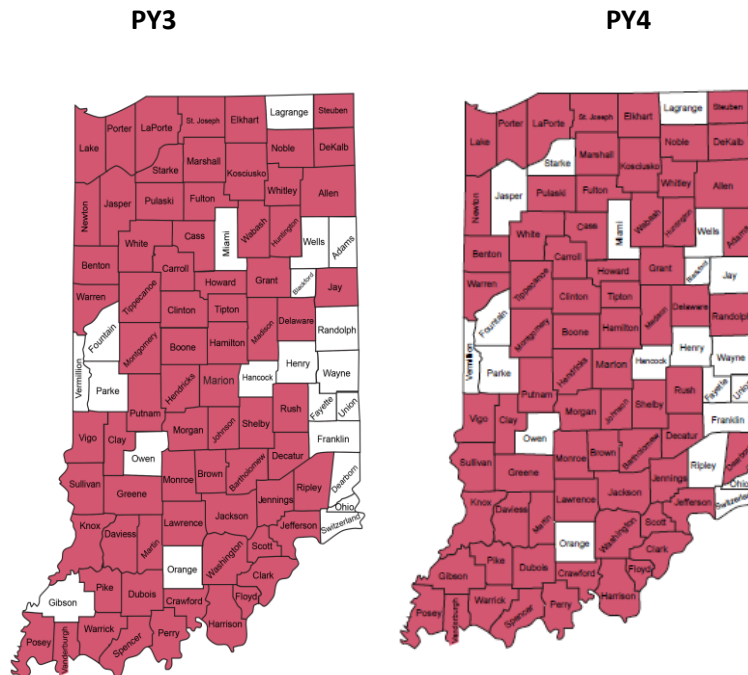


In both PY3 and PY4, there were registered e-waste collection sites in 71 of Indiana's 92 counties (Figure 3), though there was a slight change in which counties comprised the 71 between the two years. These collection sites include all registered permanent collection locations in the State and some, but not most, temporary and special collection events.

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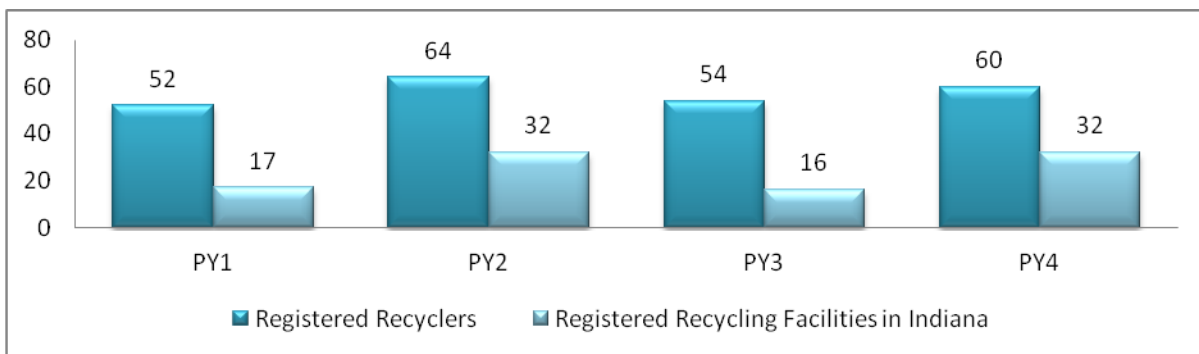
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Figure 3: Counties with Registered Collection Sites



Of the three groups required to register with Indiana E-Cycle, **recyclers** have had the most inconsistent registration numbers from year to year (Figure 4). IDEM is not sure at this time what the reason(s) is for this variation. Though registration is only required for recyclers that recycle CEDs on behalf of a registered manufacturer, the majority of the recyclers registered in PY4 did not work with a registered manufacturer; only 20 of the 60 recyclers registered in PY4 recycled e-waste for a manufacturer as part of the Indiana E-Cycle program.

Figure 4: Registered Recyclers and Registered Recycling Facilities in Indiana



Program Results

It is important when reviewing the results in this report to keep in mind that for the first three program years, there was a difference in the timeframes for which the data was gathered and reported. The original

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difference in program year schedules/reporting timeframes presented a significant challenge in analyzing the program results from Program Years 1 - 3. See the chart below for a list of the program year timeframes. As of 2013, the manufacturer program year is January 1 to December 31, as the program year has been for collectors and recyclers since Indiana E-Cycle began.

PY3 was shortened for manufacturers due to the transition in program year timeframe, but the manufacturers' recycling obligations for PY3 were not affected by this change since they were based on sales data from the prior 12 months. The dates for the program years referenced in this report are as follows:

	Manufacturers	Collectors	Recyclers
PY1	Apr 1, 2010 - March 31, 2011	Jan 1, 2010 - Dec 31, 2010	Jan 1, 2010 - Dec 31, 2010
PY2	Apr 1, 2011 - March 31, 2012	Jan 1, 2011 - Dec 31, 2011	Jan 1, 2011 - Dec 31, 2011
PY3	Apr 1, 2012 - Dec 31, 2012	Jan 1, 2012 - Dec 31, 2012	Jan 1, 2012 - Dec 31, 2012
PY4	Jan 1, 2013 - Dec 31, 2013	Jan 1, 2013 - Dec 31, 2013	Jan 1, 2013 - Dec 31, 2013

Manufacturers

PY4 was the first year for which manufacturers and recyclers reported on the same timeframe (calendar year), which allowed IDEM to cross-check the reports and resolve discrepancies between them, of which there were many.

After peaking at 95% in PY3, the percentage of registered manufacturers that submitted a complete report decreased in Program Year 4 to 91% (Figure 5). However, PY4 saw the largest percentage of manufacturers that either met or exceeded their recycling obligation. This result was anticipated, as PY4 is the first program year for which manufacturers that do not fulfill their recycling obligation are subject to a shortfall fee, known as the variable recycling fee (VRF). The variable recycling fee is calculated as follows:

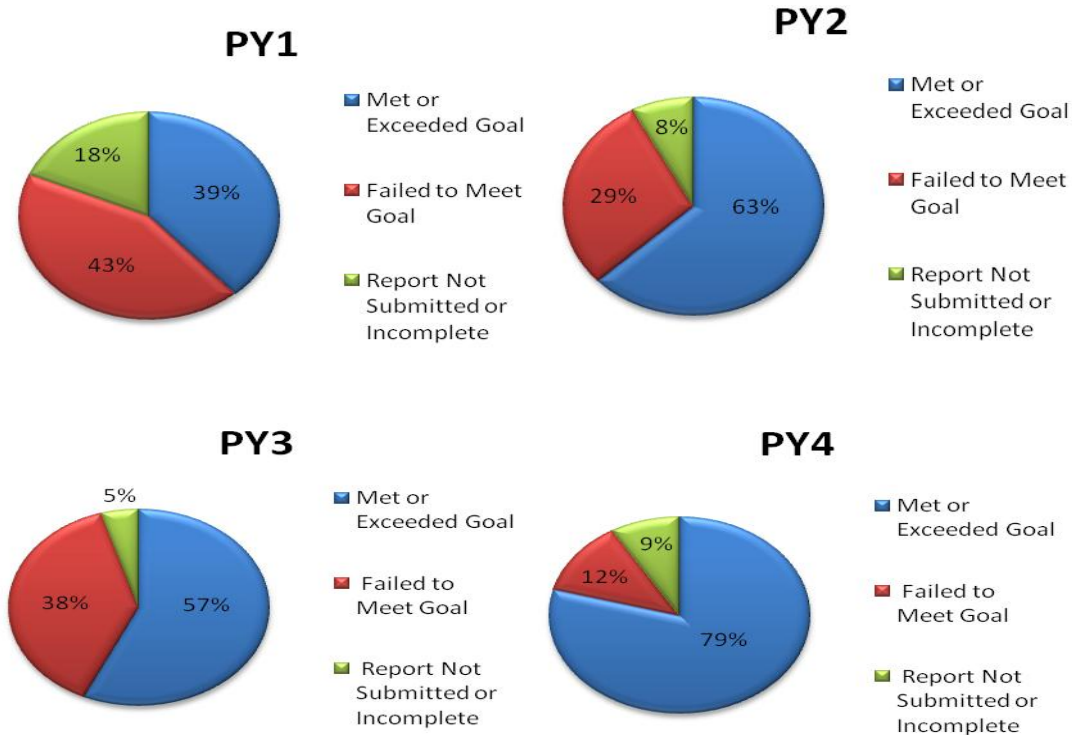
- Forty cents per pound of shortfall for manufacturers that recycle less than 50 percent of their goal.
- Thirty cents per pound of shortfall for manufacturers that recycle at least 50 percent, but less than 90 percent, of their goal.

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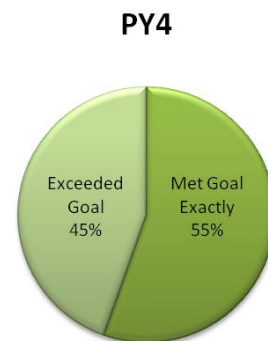
- Twenty cents per pound of shortfall for manufacturers that recycle at least 90 percent of their goal.

Figure 5: Annual Reports Received - Manufacturers



Of the manufacturers that either met or exceed their goal, 55% met their obligation exactly (Figure 6), indicating that those manufacturers contracted with recyclers for precisely the amount they were responsible for recycling rather than recycling all of the eligible CEDs that were collected at a given location or event. An even closer look at the reports of the 65 manufacturers that either met or exceeded their recycling obligation reveals that 14% of those manufacturers had a goal of zero pounds (Figure 7). Manufacturers can have a recycling obligation if they did not have any qualifying sales during the previous year. This is a reflection of the language in the statute that requires registration for manufacturers of video display devices sold *or offered for sale* to households. IN PY4, 9% of the manufacturers met their goal exclusively through the use of credits and/or the purchase of pounds, meaning that they did not implement a recycling plan in the State during 2013.

Figure 6: Manufacturer Annual Reports - Met or Exceeded Goal Percentages



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Also striking is the difference in compliance rates between small and large manufacturers. Large manufacturers have a significantly better rate of report submittal and are much more likely to meet or exceed their recycling obligation than manufacturers with a smaller market share (Figure 8). Manufacturers that sold less than 100 units of VDDs to households in Indiana during the previous year are exempt from paying the VRF if they fail to fulfill their recycling obligation. Two of the three large manufacturers that did not submit a PY4 annual report have gone out of business.

Altogether, manufacturers exceeded their recycling obligation again in PY4 (Figure 9). This was the second program year for which this was achieved before the inclusion of incentives. A 50% incentive is earned for collecting CEDs from non-metropolitan counties in the State and a 10% incentive is earned for recycling CEDs at a registered facility in Indiana. These incentives can be combined- each pound of CED collected from a non-metropolitan county and recycled at an in-state recycling facility is counted as 1.6 pounds recycled.

Figure 7: Manufacturer Annual Reports - Met or Exceeded Goal

Details

PY4

- Goal Met Entirely Through Use of Credits and/or Purchased Pounds
- Goal was 0 Pounds
- Goal Met by Recycling and/or Use of Credits and Purchased Pounds

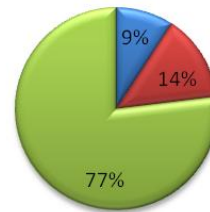
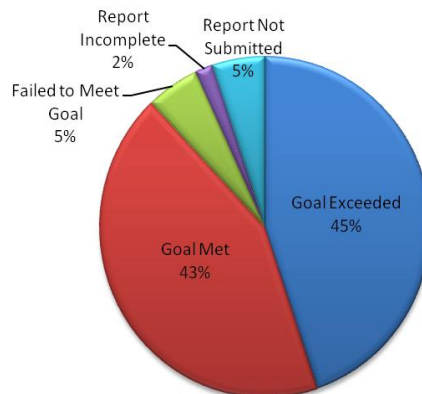


Figure 8: Small vs Large Manufacturer Compliance

PY4: Manufacturers that Sold Less than 100 VDDs



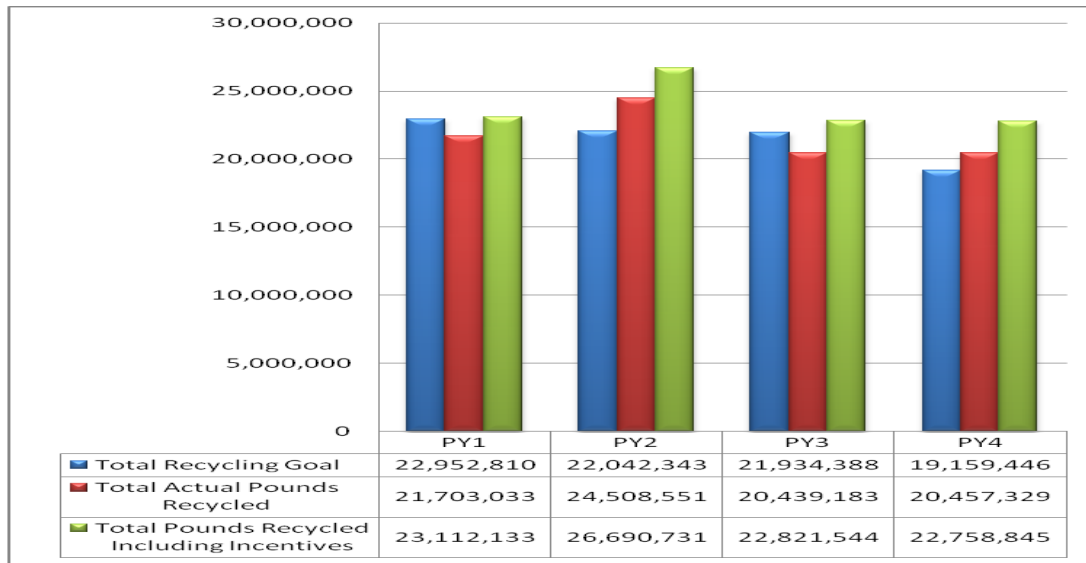
PY4: Manufacturers that Sold More than 100 VDDs



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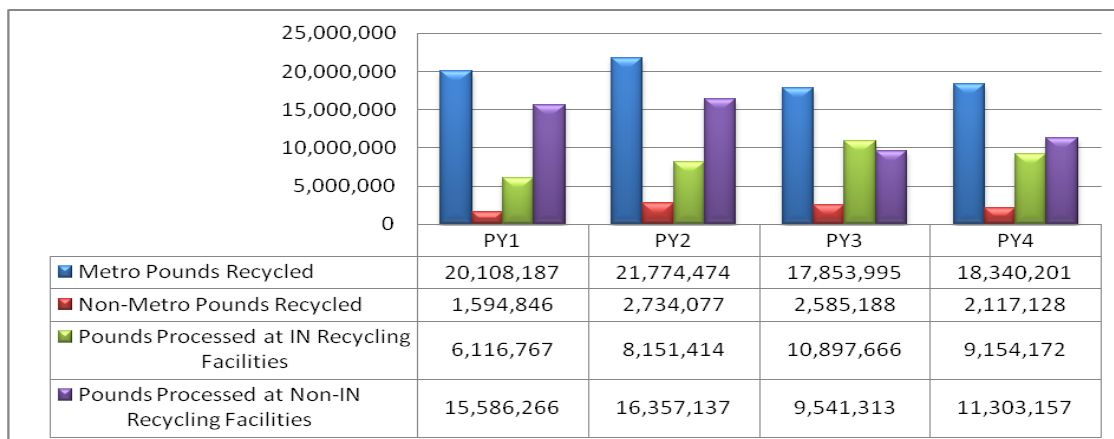
Figure 9: Pounds Recycled - Manufacturers



The addition of incentives earned to the total amount of CEDs physically recycled adds an additional 1.97 million pounds to the amount of recycling credited to registered manufacturers during PY4. The total amount recycled in PY4 of 22,758,845 pounds also includes credits applied as well as pounds purchased.

Despite the incentives offered for collecting CEDs in non-metropolitan counties in Indiana, the vast majority of e-waste collected by manufacturers under Indiana E-Cycle continues to be collected in metropolitan counties in the State (Figure 10). Consistent with PY1 and PY2, PY4 again saw more pounds of CEDs recycled at recycling facilities in other states than in Indiana, though the gap has narrowed significantly since the beginning of the program.

Figure 10: Pounds Recycled Details (Actual Pounds) - Manufacturers



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Because of the diversity among the 25 state e-cycling programs currently legislated throughout the country, it is difficult to compare results between programs in a way that is meaningful due to the wide variety in how recycling targets, if any, are established and what electronic devices are covered by the program. One of the few results that can be compared across states is pounds of e-waste recycled per resident. Though not perfect, this information at least provides an indication as to how e-cycling rates compare across the country. Per capita e-cycling rates are most often compared without the inclusion of incentives since not all state programs offer incentives. The results of Indiana E-Cycle in terms of pounds of e-waste recycled per resident are as follows:

When compared to the results from other states, Indiana E-Cycle's per capita rate is in the median range both amongst all of the states with e-cycle programs and amongst the states in the Midwest with e-cycle programs.

If a manufacturer exceeds their recycling obligation, 25% of the excess pounds are converted to recycling credits that can be used by the manufacturer in any of the three immediately following program years to make up a shortfall or sold to another manufacturer. Due to the implementation of the shortfall fee (VRF), PY4 was the first year during which manufacturers bought and sold program credits, though many more credits expired in PY4 than were used or sold. Credits details are as follows:

	<u>Lbs/Capita (Actual Pounds)</u>	<u>Lbs/Capita (Including Incentives)</u>
PY1	3.35	3.56
PY2	3.78	4.12
PY3	3.13	3.49
PY4	3.11	3.46

	<u>Credits Earned</u>	<u>Credits Bought/ Sold</u>	<u>Credits Used</u>	<u>Credits Expired</u>	<u>Credits Retained</u>	<u>Manufacturers Holding Credits</u>	<u>Percent of Registered Manufacturers Holding Credits</u>
PY1	1,074,733	0	n/a	n/a	1,074,733	18	28%
PY2	1,623,705	0	19,253	n/a	2,653,837	23	35%
PY3	555,630	0	116,758	n/a	3,090,762	26	40%
PY4	967,292	87,256	104,592	809,875	3,039,188	37	45%

Recyclers

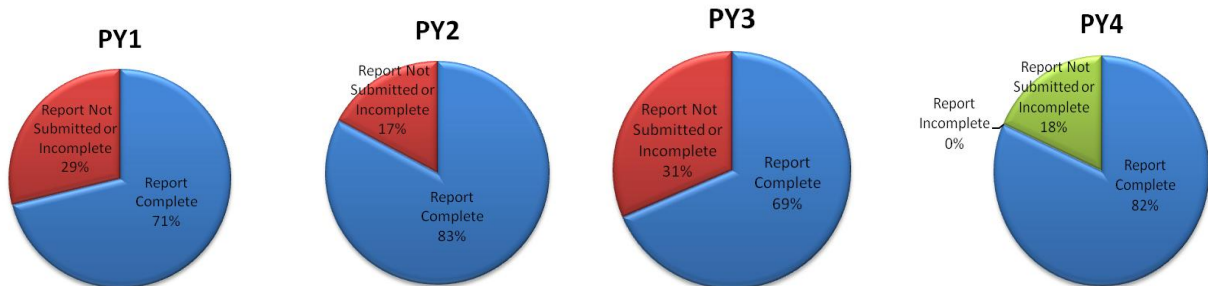
The annual report submittal rate for recyclers continues to be an challenge and a concern (Figure 11). Because registration with the program is voluntary for recyclers unless they are recycling for a manufacturer, it is more difficult to motivate them to submit reports than it is manufacturers. There is a

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significant difference in the report submittal rate of those who recycle on behalf of registered manufacturers and those who do not.

Figure 11: Annual Reports Received - Recyclers



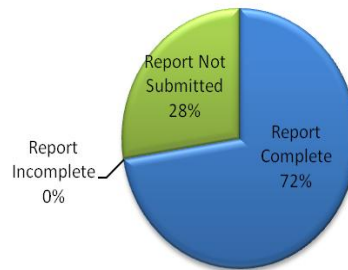
For PY4, the annual report submittal rate for recyclers recycling on behalf of at least one registered manufacturer was 100%; of the recyclers without a manufacturer contract, only 72% of the required reports were submitted (Figure 12). Use of an online reporting system such as Re-TRAC Connect could potentially increase the reporting rate for recyclers as the use of <http://www.ecycleregistration.org/> has increased the efficiency of the manufacturer registration process and led to an increase in manufacturer registrations since it began being used by Indiana E-Cycle in PY4.

Figure 12: Annual Report Compliance - Recyclers

PY4: Recyclers that Recycled on Behalf of Registered Manufacturer(s)



PY4: Recyclers that Did Not Recycle on Behalf of Registered Manufacturer(s)



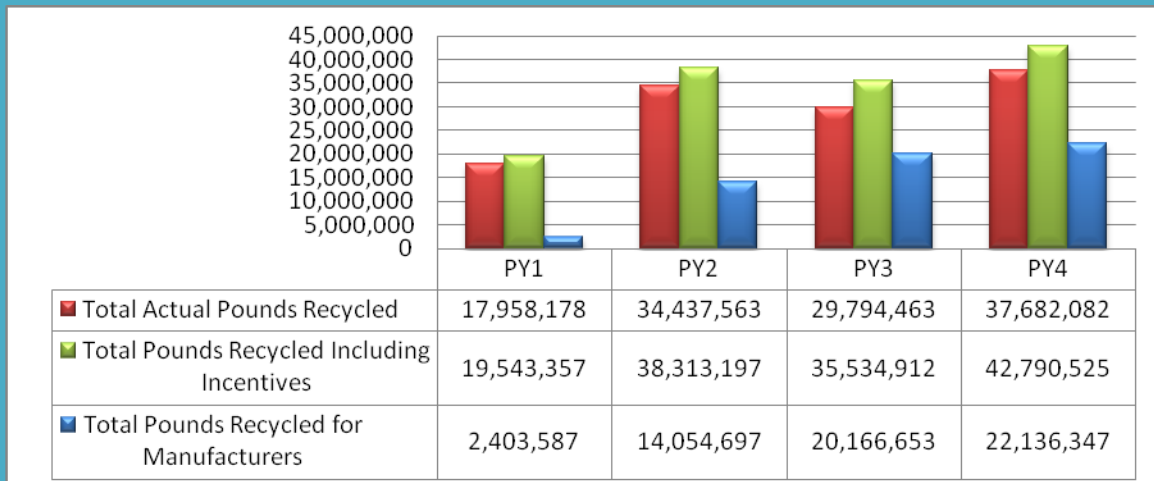
There continues to be more e-waste being recycled than registered manufacturers are responsible for recycling. This does not include the pounds from the 11 recyclers that did not report for PY4 or the

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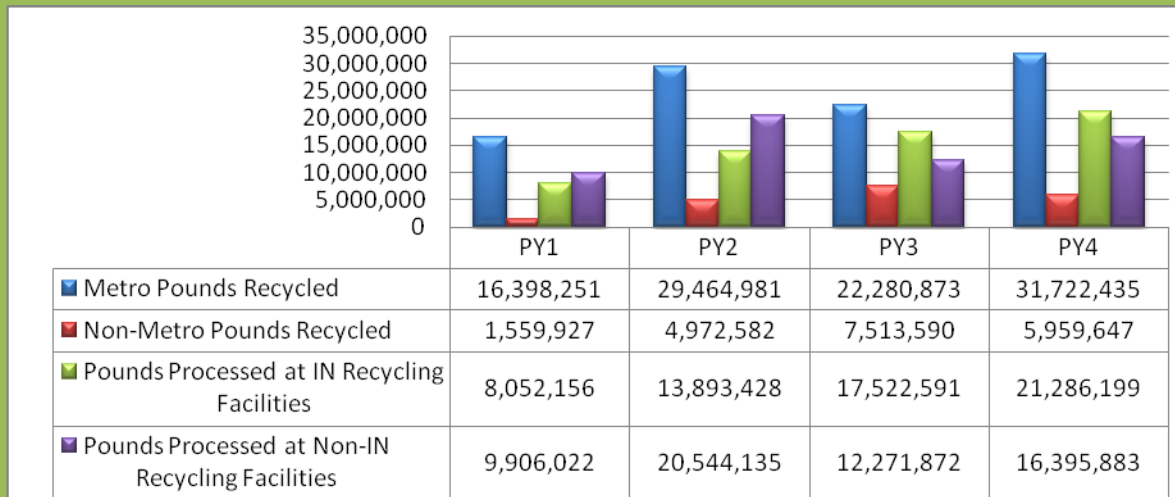
e-waste that is being recycled outside the scope of Indiana E-Cycle (Figure 13).

Figure 13: Pounds Recycled - Recyclers



PY4 was the first year for which recyclers reported a decrease from the previous year in the pounds of CEDs collected from non-metropolitan counties in the State (Figure 14). Conversely, pounds recycled at in-state facilities continue to increase.

Figure 14: Pounds Recycled Details (Actual Pounds) - Recyclers



It is anticipated that the demand for CEDs in need of recycling in Indiana will continue to significantly exceed the amount of CEDs that manufacturers are responsible for recycling given that new VDDs are increasing lighter than older CEDs; that the list of items that meet the definition of CED is much more extensive than the list of items that are defined as VDDs; and that manufacturers' recycling obligations are based solely on their sales of VDDs to households, while CEDs collected to meet their recycling

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obligations can come from households, small businesses, and public schools. It is therefore imperative that the Indiana E-Waste Law be reevaluated on a regular basis to incorporate needed revisions based on the experience of implementing the law thus far and the experience of other states in implementing their e-waste laws. Each year there are revisions proposed to the e-cycling programs in numerous states as the programs grow and adapt to the constantly evolving electronics on the market as well as the complex e-cycling industry.

Other Collection & Recycling Efforts

This report is required to include information about CEDs that are being collected by persons other than registered manufacturers, collectors, and recyclers as well as information about CEDs, if any, being disposed of in landfills in Indiana. This information has not been included because there is no comprehensive mechanism in place to collect such data.

Multistate Collaboration

The Indiana E-Waste Law permits IDEM to participate in and to join regional multistate organizations or compacts to assist in implementing the article. IDEM has taken advantage of this opportunity and participates in regular conference calls with the other Midwestern states, which are coordinated by U.S. EPA's Region 5 office. The majority of the states that participate in the calls also have e-waste laws, most notably, Minnesota and Wisconsin, which have laws comparable to Indiana's. The information shared and the coordination achieved on these calls is incredibly valuable in assisting with the implementation of the law.

Additionally, IDEM is an active voting member of the Electronics Recycling Coordination Clearinghouse (ERCC), a forum for coordination and information exchange among the state and local agencies that are implementing electronics recycling laws and all impacted stakeholders. Membership has proven very beneficial in providing the manager of the Indiana E-Cycle program with a forum for information exchange with the managers of the other state e-cycle programs. The ERCC also provides members the opportunity to have a unified voice when addressing issues facing multiple states and a potentially stronger and more effective means by which to contact manufacturers that are not in compliance.

**For Any Questions or Comments Please
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